

MARKED-UP VERSION OF 1ST PARAGRAPH OF PAGE 1**BACKGROUND OF THE INVENTION****1. Field of the Invention**

The invention relates to a thermoplastic polymer blend comprising thermoplastic starch as well as a method for producing a thermoplastically deformable, biologically degradable polymer blend, that is shape-resistant in water, on the basis of native starch, synthetic polymers, for example, aliphatic polyesters and their copolymers, polyvinyl acetate (PVAc), polyvinyl alcohol (PVOH) and other, preferably biologically degradable synthetic polymers with addition of a hydrolysis component on the basis of PVAc as well as water or/and lower polyfunctional alcohols by reactive extrusion, preferably in double screw extruders. The reaction product can be processed as a function of the product composition by means of conventional processing machines for thermoplastics to injection molded, deep-drawn, and blow molded parts as well as foils with adjustable service value properties, for example, shape resistance in water and biological degradability. The polymer blend according to the invention is also used as a raw material for fibers as well as material for melt film coatings.

2. Description of the Related Art

MARKED-UP VERSION OF 1ST PARAGRAPH OF PAGE 4**SUMMARY OF THE INVENTION**

Based on the ecological goals of employing renewable raw materials to an even greater extent and to economically produce environmentally safe products, it is an object of the invention to provide a polymer blend on the basis of thermoplastic starch with improved properties.

MARKED-UP VERSION OF 5TH FULL PARAGRAPH OF PAGE 8**DESCRIPTION OF PREFERRED EMBODIMENTS**

The invention will be explained in the following with the aid of several examples.